

RP100

**MODELING
GUITAR
PROCESSOR**

DigitTech



**User's
Guide**



These symbols are internationally accepted symbols that warn of potential hazards with electrical products. The lightning flash means that there are dangerous voltages present within the unit. The exclamation point indicates that it is necessary for the user to refer to the owners manual.

These symbols warn that there are no user serviceable parts inside the unit. Do not open the unit. Do not attempt to service the unit yourself. Refer all servicing to qualified personnel. Opening the chassis for any reason will void the manufacturer's warranty. Do not get the unit wet. If liquid is spilled on the unit, shut it off immediately and take it to a dealer for service. Disconnect the unit during storms to prevent damage.

Electromagnetic Compatibility

Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.
- Use only shielded interconnecting cables.
- Operation of this unit within significant electromagnetic fields should be avoided.

Warning

For your protection, please read the following:

Water and Moisture: Appliances should not be used near water (e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.) Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

Power Sources: The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

Grounding or Polarization: Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

Power Cord Protection: Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

Servicing: To reduce the risk of fire or electrical shock, the user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

For units equipped with externally accessible fuse receptacle: Replace fuse with same type and rating only.

DECLARATION OF CONFORMITY

Manufacturer's Name: DigiTech
Manufacturer's Address: 8760 S. Sandy Parkway
Sandy, Utah 84070, USA

declares that the product:
Product name: RP100
Note: Product name may be suffixed by the letters EX, EU, JA, and UK.

Product option: all (requires Class II power adapter that conforms to the requirements of EN60065, EN60742, or equivalent.)

conforms to the following Product Specifications:

Safety: EN 60065 (1993)
IEC65 (1985) with Amendments 1, 2, 3

EMC: EN 55013 (1990)
EN 55020 (1991)

Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 72/23/EEC and the EMC Directive 89/336/EEC as amended by Directive 93/68/EEC.

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Vice-President of Engineering
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Date: August 11, 2000

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Warranty

We at **DigiTech** are very proud of our products and back-up each one we sell with the following warranty:

1. The warranty registration card must be mailed within ten days after purchase date to validate this warranty.
2. DigiTech warrants this product, when used solely within the U.S., to be free from defects in materials and workmanship under normal use and service.
3. DigiTech liability under this warranty is limited to repairing or replacing defective materials that show evidence of defect, provided the product is returned to DigiTech WITH RETURN AUTHORIZATION, where all parts and labor will be covered up to a period of one year. A Return Authorization number may be obtained from DigiTech by telephone. The company shall not be liable for any consequential damage as a result of the product's use in any circuit or assembly.
4. Proof-of-purchase is considered to be the burden of the consumer.
5. DigiTech reserves the right to make changes in design, or make additions to, or improvements upon this product without incurring any obligation to install the same on products previously manufactured.
6. The consumer forfeits the benefits of this warranty if the product's main assembly is opened and tampered with by anyone other than a certified DigiTech technician or, if the product is used with AC voltages outside of the range suggested by the manufacturer.
7. The foregoing is in lieu of all other warranties, expressed or implied, and DigiTech neither assumes nor authorizes any person to assume any obligation or liability in connection with the sale of this product. In no event shall DigiTech or its dealers be liable for special or consequential damages or from any delay in the performance of this warranty due to causes beyond their control.

NOTE: The information contained in this manual is subject to change at any time without notification. Some information contained in this manual may also be inaccurate due to undocumented changes in the product or operating system since this version of the manual was completed. The information contained in this version of the owner's manual supersedes all previous versions.

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Section-1 Introduction

Getting Acquainted

Congratulations on your wise choice in purchasing the RP100. Thanks to the continuous advances in musical technology, you have the flexibility, power, and capability of producing sonic creations never before thought possible. Although the RP100 is so user friendly you may not even need to read this manual, we recommend that you become better acquainted with us, and what we have to offer by going through this User's Guide with your RP100 in front of you. It is your key to unlocking the potential within the RP100.

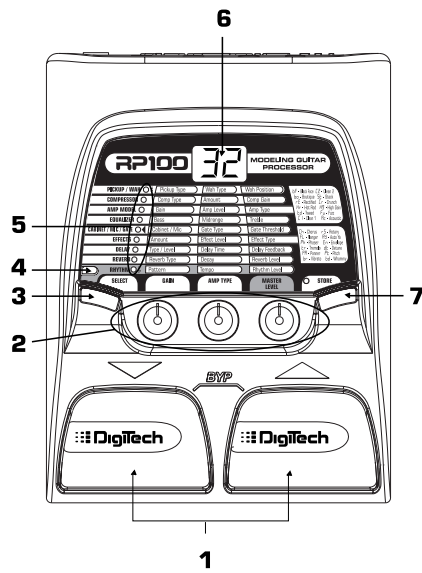
Included Items

Before you get started, please make sure that the following items have been included:

- **RP100**
- **User's Guide**
- **Warranty Card**

The utmost care was taken while your RP100 was being manufactured. Everything should be included and in perfect working order. If anything is missing, contact the factory at once. Please help us become acquainted with you and your needs by completing your warranty card. It is your safeguard should a problem arise with your RP100.

**A Guided Tour of the RP100
The Front Panel**

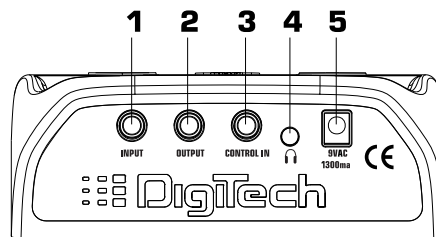


1. **Footswitches** - These 2 Footswitches are used to select Presets, access the Tuner, or bypass the RP100. The Footswitch on the right will increase, and the Footswitch on the left will decrease the selected Preset. Pressing both Footswitches together will bypass the currently selected Preset. Pressing and holding both Footswitches will access the Tuner.
2. **Parameter Knobs** - The Parameter knobs perform various functions depending on which mode is currently active in the RP100. In performance mode, these knobs control the Gain, Amp Type, and Master Level. In Edit mode, these knobs adjust the Parameter values listed directly above each knob for the selected effect. In Rhythm Trainer, these knobs control the Pattern, Tempo, and Level. In Tuner mode, these knobs are used to select the desired tuning reference.
3. **Select Button** - This button is used to enter the Edit mode, and to select individual effect to be edited. Successive presses of this button will advance through all available Effects.
4. **Rhythm** - The Rhythm button is used to turn on and off the Rhythm Trainer drum loop. When the Rhythm feature is active, the Rhythm LED lights and the selected drum pattern plays continuously.
5. **Matrix** - The matrix provides information regarding the current Preset, and Parameter edit functions. In performance mode, the 9 LEDs running down the left side of the Matrix will provide a visual indication of which effects are in use for the currently selected Preset. In Edit mode, the LEDs indicate the Effect currently selected for editing. In Tuner mode, the LEDs indicate whether the note played is sharp, flat, or in tune.

6. **Display** - The Display provides information for different functions depending on the mode that has been selected. In Performance mode, the Display will show the currently selected Preset number. In Edit mode, the Display will show the value of the parameter being adjusted. In Tuner mode, the Display will show the note played.

7. **Store** - The Store button is used to save your custom edits to the user Presets.

Rear Panel



1. **Input** - Connect your instrument to this jack.

2. **Output** - This is a stereo TRS jack. Connect from this jack to the input of a single amplifier for mono applications, or use a TRS stereo "Y" cord to connect to the inputs of 2 amplifiers for stereo applications.

3. **Control In** - Connect an expression pedal or volume pedal to this jack for the purpose of controlling Volume, Wah, or Whammy™ in the RP100.
4. **Headphones** - Connect a pair of stereo headphones to this jack.
5. **Power Input** - Connect only the optional DigiTech PS0913B power supply to this jack.

Getting Started

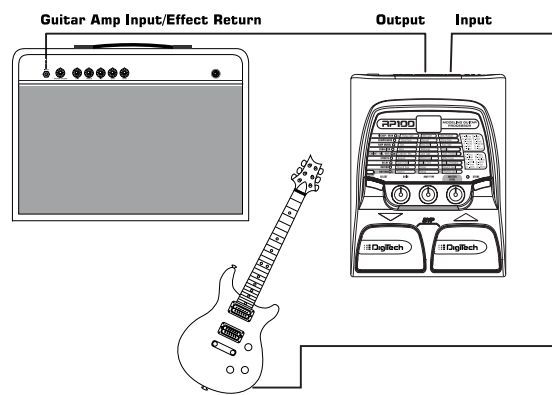
Making Connections

There are several different connection options available when using the RP100. The following diagrams show the connections for some of these options.

Before connecting the RP100, make sure that the power to your amplifier is turned off, and that the power to the RP100 is disconnected. There is no power switch on the RP100. To turn the RP100 on or off, connect or disconnect your instrument to the **Input Jack** (for battery power) or connect the optional PS0913B power supply from the **Power Jack** to an AC outlet (for AC power).

Mono Operation

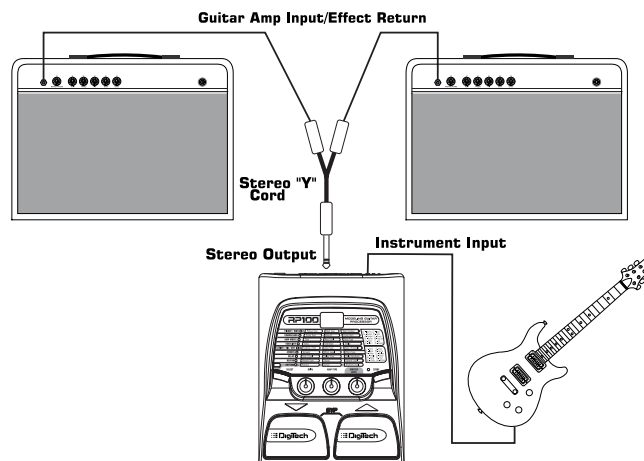
Connect your guitar to the **Input** of the RP100. Connect a single mono instrument cable from the **Stereo Output** of the RP100 to the instrument input on your amplifier, or to the line input of a power amp.



NOTE: When using a guitar amp, it may be best to connect the guitar to the input of the RP100 and the **Output** of the RP100 to the effect return of the amplifier.

Stereo Operation

For stereo operation connect the guitar to the **Input** of the RP100. Connect a TRS stereo "Y" cord to the RP100's **Stereo Output**. Connect one end of the "Y" cord to the input of one amplifier, channel of a mixer, or power amp. Connect the second end of the "Y" cord to a second amplifier, second channel of a mixer, or power amp. If connecting to a mixing console, set the pan controls of the mixer hard left and right in order to retain stereo separation and be sure to engage the RP100's Cabinet Emulator. See page 18 for more on selecting the Cabinet Emulator.

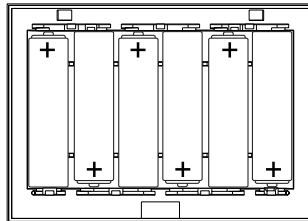


Applying Power

There are two options for powering the RP100: battery power, and AC power. Before applying power to anything, set your amp(s) to a clean tone and set the tone controls to a flat EQ response (on most amps, this would be 0 or 5 on the tone controls). Then follow the steps listed below.

Battery Power

The RP100 can be run for about 8 hours on 6 AA batteries. The battery compartment is located on the bottom of the RP100. The following diagram shows the correct polarity for battery installation.



Connecting your instrument to the **Input** of the RP100 will engage the battery power and disconnecting your instrument from the **Input** of the RP100 will disengage the battery power. Once the connections have been made, and the RP100 is powered (indicated by numbers appearing in the Display), turn the RP100's **Master Level** (far right knob) all the way down. Turn your amplifier(s) power switch to the on position and adjust the volume(s) to a normal playing level. Gradually increase the RP100 **Master Level** to achieve the desired volume. **To prolong the battery life, disconnect your instrument from the RP100's Input when not in use .**

AC Power

The RP100 can also be powered with the optional PS0913B power supply. Once the audio connections have been made, turn the RP100's **Master Level** (far right knob) all the way down. Connect the plug of the PS0913B power supply to the power jack on the rear panel of the RP100. Connect the other end of the PS0913B power supply to an AC outlet. Turn the power of your amplifier(s) to the on position and adjust the volume(s) to a normal playing level. Gradually increase the RP100 **Master Level** to achieve the desired volume.

About the RP100

The Presets

Presets are numbered locations of programmed sounds which reside in the RP100. Presets are recalled with the **Footswitches**. The active effects in each Preset will be indicated by the lighted LEDs in the Effect Matrix. The RP100 comes with 40 User Presets (Presets 1-40) and 40 Factory Presets (Presets 41-80). The User Presets are locations where your creations may be stored. The Factory Presets will not allow you to store any changes to them. From the factory, the 40 User Presets are exact duplicates of the 40 Factory Presets. This allows you to make your own Presets without the worry of losing any of the sounds that the RP100 came with.

Performance Mode

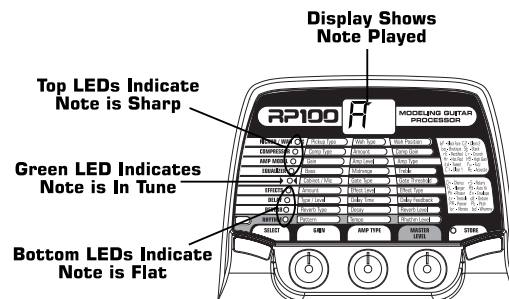
When you first apply power to the RP100, it will power up in Performance mode. Performance mode provides access to all of the Presets within the RP100 via the **Right and Left Footswitches**. The **Parameter 1** (left) knob will adjust the Amp Gain (distortion), the **Parameter 2** (middle) knob will select the Amp Type, and the **Parameter 3** (right) knob will adjust the Master Level (volume).

Bypass Mode

The RP100 Presets can be bypassed for a clean, unprocessed guitar tone. To bypass the RP100, press both **Footswitches** simultaneously. The Display will read **bY** indicating the Preset is bypassed. Pressing both **Footswitches** simultaneously again will exit Bypass and return the RP100 to the last Preset used.

Tuner Mode

The Tuner in the RP100 allows you to quickly tune or check the tuning on your guitar. Enter Tuner mode by pressing and holding both **Footswitches** simultaneously. The Display will briefly show $E\flat$ indicating that you are in Tuner mode. To begin tuning, play a note on your guitar (a harmonic at the 12th fret usually works best). The Display shows the note being played. The Matrix LEDs indicate whether you are sharp or flat. The top 4 Red LEDs indicate the note is sharp and should be tuned down. The bottom 4 Red LEDs indicate the note is flat and should be tuned up. The center Green LED indicates the note is in tune. The output is muted in Tuner mode.



In Tuner mode, you can change your tuning reference. The default factory setting is A=440 Hz. (displayed as $4\sharp$). Rotating the **Parameter 1** knob will select alternate dropped tunings. Alternate tunings are A = Ab (displayed as $A\flat$), A = G (displayed as G), and A = Gb (displayed as $G\flat$). The display window will briefly flash the currently selected tuning preference. Exit tuner mode by pressing both **Footswitches** simultaneously.

Section Two - Editing Functions

Editing/Creating Presets

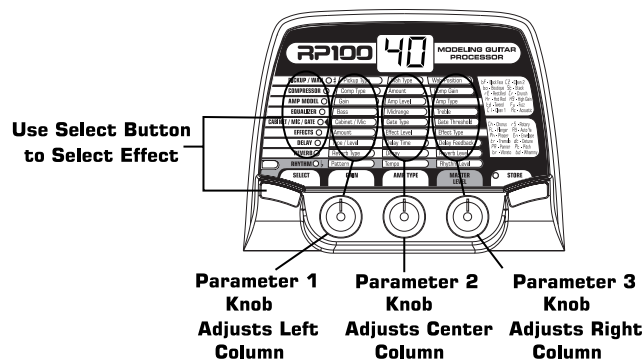
Creating your own signature sound with the RP100 is easy and intuitive. The RP100 lets you create your own Presets, or fine tune existing Presets to suit your needs. When creating or editing a sound, you must first start with one of the User or Factory Presets. It is not possible to start with a completely empty Preset. The Preset number does not necessarily need to be the location which you intend to have it reside, as you can save your creation to any User Preset location during the store process.

To edit or create a Preset:

1. Use the **Footswitches** to select a Preset which will be your starting point.
2. Once you have found a Preset that you wish to edit, press the **Select** button once. This will take you into the Editing mode.
3. Use the **Select** button in conjunction with the **Matrix** to choose the effect you wish to edit.
4. Use the 3 **Knobs** to change parameter values to achieve the desired sound you want.

The Matrix

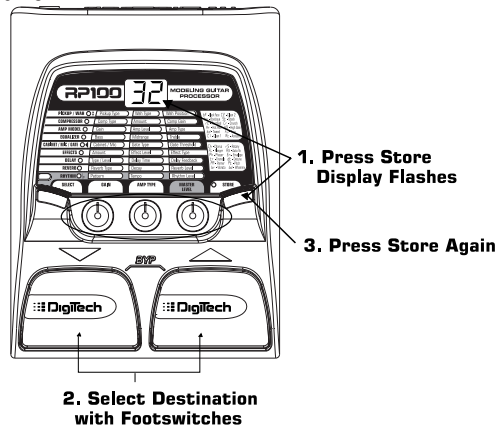
The Matrix is where all Effects and Parameters are selected for editing. In Edit mode, successive presses of the **Select** button will advance to the next Effect row. The LED will light indicating which Effect group has been selected. Each Effect will have up to 3 Parameters which can be modified. The **Knob** under each column of Parameters is used to change the value for the corresponding Parameter of the selected Effect. As a **Knob** is rotated, the Parameter value or status will be shown in the Display.



When the stored value of a Parameter is changed, the Store LED will light indicating that you need to store the changes. Changing Presets, or turning the power off before storing any changes will erase any changes made and revert to the stored values for the Preset.

Storing/Copying a Preset

Once the Preset has been modified to your liking, you may store your settings to any of the 40 User Preset locations (Presets 1-40). The following steps outline the procedure for storing changes to a Preset or copying a Preset to a different location:



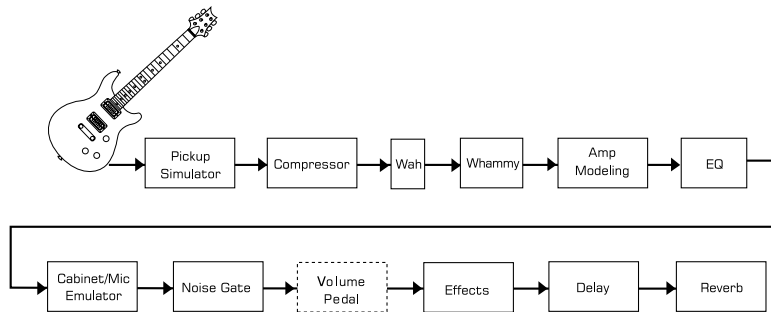
1. Press the **Store** button once and the current Preset location will flash in the Display. This is asking you to select a User Preset location where your new sound will reside.
2. Select the User Preset location using the **Footswitches**.
- 3 Press the **Store** button again to save the changes.

The procedure for copying one Preset to another Preset location is the same. Simply use the **Footswitches** to select the Preset that you want to copy, then follow the steps listed above.

Section Three - Effects and Parameters

About the Effects

The RP100 can be thought of as several different “virtual” amplifiers, and individual, hi-tech stomp boxes. With stomp boxes, the order in which they are connected can make a big difference in how good the overall sound is. The following diagram shows the order of the effects contained in the RP100.



Effect Definitions

Each Effect within the RP100 can be programmed to suit your personal tastes and application. Understanding how these Effects will alter the sound, and how each Parameter will alter the Effect will help you achieve the sound you are looking for. The following overview of the RP100's effects outlines what each Effect and Parameter does.

Pickup/Wah

The **Pickup Simulator** lets you get the thick tone of a humbucker pickup from a guitar with single coil pickups, or the bright edgy sound of a single coil pickup from a guitar with a humbucker. This allows you to have the best of both worlds without having to change guitars during a performance.

Wah is an effect controlled by an Expression Pedal making the guitar sound as if it's saying "Wah."

Pickup Type - The **Parameter 1** knob selects the Pick Up type which will be simulated.

oF - Turns the Pickup Simulator off.

hb - Gives a single coil pick up the warm tone of a humbucker.

5C - Gives a humbucker the unique sound of a single coil.

Wah Type - The **Parameter 2** knob selects the Wah Type.

oF - Turns the Wah Effect off.

c r - Cry Wah is a traditional sounding Wah.

b t - Boutique Wah is a wider sweeping Wah with a more modern sound.

F r - Full Range Wah sweeps the entire spectrum of audible frequencies.

Wah Position - The **Parameter 3** knob adjusts the Wah Pedal Position. Ranges from *U* (toe up) to *59* (toe down).

Compressor

A **Compressor** is used to increase sustain, tighten up guitars, and prevent the signal from clipping the input of other effects. It sets a maximum boundary for the strength of a signal.

Comp Type - The **Parameter 1** knob selects the Compressor Type (Attack).

oF - Turns the Compressor off.

1 to *3* - Controls the length of time it takes for the Compressor to respond to a signal exceeding the boundary.

Amount - The **Parameter 2** knob adjusts the Amount of Compression (ratio and sustain) and ranges from 1 (slight compression) through 20 (maximum sustain).

Gain - The **Parameter 3** knob adjusts the Output Gain from the Compressor. Ranges from 0 to 5.

Amp Modeling

Amp Modeling is a technology which applies the tone of several popular modern and vintage amps. Amp Modeling also includes an acoustic guitar simulation.

Amp Gain - The **Parameter 1** knob adjusts the Gain (distortion) for the selected Amp Model (not available for Acoustic). The Gain parameter ranges from 0 to 99.

Amp Level - The **Parameter 2** knob adjusts the Level (volume) of the selected Amp Model. The Level parameter ranges from 0 to 99.

Amp Type - The **Parameter 3** knob selects the 12 types of Amp Models.

bF - Based on a '65 Fender Twin Reverb

bD - Based on a Matchless DC30

rE - Based on a Mesa Dual Rectifier

hE - Based on a Mesa Boogie Mark II C

Ed - Based on a '57 Fender Tweed Deluxe

El - Based on a Vox AC30 top boost

EE - A clean tube combo setting

SE - Based on a Marshall JCM900

Er - A nice crunchy combo

HE - Based on the Johnson JM150 High Gain

Fd - A vintage fuzz distortion

RE - A flat top acoustic guitar

Marshall® is a registered trademark of Marshall Amplification Plc. Vox® is a registered trademark of Korg UK. Fender, Matchless, and Mesa Boogie, are trademarks of their respective companies and are in no way associated with DigiTech.

EQ

Equalization is an extremely useful tool used to further shape the tonal response of your guitar signal. The EQ in the RP100 is similar to the tone knobs on an amplifier. All three EQ parameters range from -12dB to +12 dB.

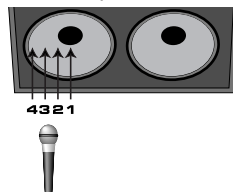
Bass - The **Parameter 1** knob adjusts the amount of low end enhancement (Bass).
Mid - The **Parameter 2** knob adjusts the amount of mid range enhancement.
Treble - The **Parameter 3** knob adjusts the amount of high end enhancement (Treble).

Cabinet/Gate

The **Cabinet Modeling** simulates different types of miked speaker cabinets. You have your choice of 3 Cabinet Types and 4 Mic Placements in relationship to the speaker cabinet.

A **Noise Gate** is designed to eliminate noise while you are not playing.

Cabinet/Mic - The **Parameter 1** knob selects the type of simulated Speaker cabinet and mic placement in relation to the speaker.



[F] - Cabinet Modeling off

[R1] - Dark 4x12 Mic 1

[R2] - Dark 4x12 Mic 2

[R3] - Dark 4x12 Mic 3

[R4] - Dark 4x12 Mic 4

[b1] - Warm 4x12 Mic 1

[b2] - Warm 4x12 Mic 2

[b3] - Warm 4x12 Mic 3

[b4] - Warm 4x12 Mic 4

[L1] - Bright 2x12 Mic 1

[L2] - Bright 2x12 Mic 2

[L3] - Bright 2x12 Mic 3

[L4] - Bright 2x12 Mic 4

Gate Type - The **Parameter 2** knob selects between the Silencer™ Noise Gate, or the Auto Swell volume swell effect.

0F - Turns the Noise Gate off.

n9 - Selects the Silencer™ Noise Gate.

R 1 to R9 - Selects the Auto Swell volume swell effect. These settings will automatically ramp up the volume from a 200 milliseconds volume fade in to 2 second volume fade in.

Gate Thresh - The **Parameter 3** knob sets the signal strength (Threshold) required to open or close the Noise Gate. The Gate Threshold parameter ranges from 1 (opens easily) to 40 (requiring strong signals to open).

Effects

The Effects row in the RP100 is a multi-function module, allowing you to select effects such as; Chorus, Flanger, Phaser, Tremolo, Panner, Rotary Speaker, Vibrato, AutoYah™, Envelope, Pitch Shift, Detune, and Whammy™ effects. When the Effects row is selected, the **Parameter 3** knob is used to choose the type of Effect to be used. Only one of the effects in this row can be used at a time. After selecting the type of effect in this module, the **Parameter 1** and **Parameter 2** knobs can then be used to adjust the individual parameters associated with the selected effect. The following list describes each Effect and their parameters in more detail:

Chorus (EH)

A Chorus adds a short delay to your signal. The delayed signal is modulated in and out of tune and then mixed back with the original signal to create a thicker sound.

Amount - The **Parameter 1** knob simultaneously adjusts the rate (Speed) and intensity (Depth) of the modulation. Ranges from 1 to 99.

Level - The **Parameter 2** knob controls the mix level of the Effect. Ranges from 0 to 99.

Flange (FL)

A Flanger uses the same principle as a Chorus but uses a shorter delay time and adds regeneration (or repeats) to the modulating delay. This results in an exaggerated up and down sweeping motion to the effect.

Amount - The **Parameter 1** knob simultaneously adjusts the rate (Speed) and intensity (Depth) of the Effect. Ranges from 1 to 99.

Level - The **Parameter 2** knob controls the mix level of the Effect. Ranges from 0 to 99.

Phaser (PH)

A phaser splits the incoming signal, and then changes the phasing of the signal. This signal is then taken in and out of phase and mixed back in with the original signal. As the phasing changes, different frequencies get canceled resulting in a warm sort of twisting sound.

Amount - The **Parameter 1** knob simultaneously adjusts the rate (Speed) and intensity (Depth) of the Effect. Ranges from 1 to 99.

Level - The **Parameter 2** knob controls the mix level of the Effect. Ranges from 0 to 99.

Tremolo (TR)

A Tremolo effect modulates the volume of the signal at an even rate.

Amount - The **Parameter 1** knob adjusts the rate (Speed) at which the volume modulates. Ranges from 1 to 99.

Level - The **Parameter 2** knob adjusts the intensity (Depth) of the modulating volume. Ranges from 0 to 99.

Panner (PR)

An Auto Panner modulates the sound from left to right at an even rate.

Amount - The **Parameter 1** knob adjusts the rate (Speed) at which the signal pans from side to side. Ranges from 1 to 99.

Level - The **Parameter 2** knob adjusts the intensity (Depth) of the changing pan. Ranges from 0 to 99.

Vibrato (br)

A Vibrato effect modulates the pitch of the incoming signal at an even rate.

Amount - The **Parameter 1** knob adjusts the rate (Speed) at which the pitch modulates. Ranges from 1 to 99.

Level - The **Parameter 2** knob adjusts the intensity (Depth) of the modulating pitch. Ranges from 0 to 99.

Rotary Speaker (r5)

Rotary Speaker is an emulation of a device that included a spinning horn and woofer. The rotation of these two speakers produced an interesting combination of the sound panning from side to side, as well as a slight pitch change due to speed of the sound coming towards, and then going away from the listener.

Amount - The **Parameter 1** knob adjusts the rate (Speed) of the spinning speakers. Ranges from 1 to 99.

Level - The **Parameter 2** knob controls the mix level of the Effect. Ranges from 0 to 99.

AutoYah™ (AY)

An AutoYah™ combines the characteristics of a Wah and a Flanger together creating an almost human vowel characteristic as if the guitar were saying “Yah.” The AutoYah™ provides animation to the sound automatically based on string attack.

Amount - The **Parameter 1** knob adjusts the rate (Speed) of the sweep. Ranges from 1 to 99.

Level - The **Parameter 2** knob adjusts the intensity (Depth) of the vowel sound. Ranges from 0 to 99.

Envelope Filter (EN)

The Envelope Filter is a dynamic Wah effect that alters your sound based upon how hard you play.

Amount - The **Parameter 1** knob adjusts sensitivity or the input signal required to trigger the Wah effect. Ranges from 1 to 99.

Level - The **Parameter 2** knob controls the mix of the Envelope effect. Ranges from 0 to 99.

Pitch Shift (PS)

The Pitch Shifting copies the incoming signal, then shifts the pitch of the copy to a different note. The shifted note is then mixed back with the original signal sounding as if two guitars were playing different notes.

Amount - The **Parameter 1** knob selects the interval of the shifted pitch. Ranges from - 12 to 24.

Level - The **Parameter 2** knob controls the mix level of the shifted pitch. Ranges from 0 to 99.

Detune (dT)

A Detuner will make a copy of your incoming signal, take the copied signal slightly out of tune from the original, and mix the two signals together. The result is a doubling type of effect as if two guitars were playing the same part together.

Amount - The **Parameter 1** knob adjusts the amount of pitch difference applied to the copied signal. Ranges from - 12 to 12.

Level - The **Parameter 2** knob controls the mix of the detuned note. Ranges from 0 to 99.

Whammy™ (bD)

Whammy™ is an effect that uses an Expression Pedal to bend the pitch of the incoming signal, or add a bendable harmony with the original signal. As the Pedal is moved, the note will bend either up or down.

Amount - The **Parameter 1** knob selects the interval and direction of the pitch bend.

Whammy (no Dry Signal)

- 1 (1 octave above)
- 2 (2 octaves above)
- 3 (a 2nd below)
- 4 (a 2nd below reversed pedal action)
- 5 (a 4th below)
- 6 (1 octave below)
- 7 (2 octaves below)
- 8 (6 octaves below)

Harmony Bends (Dry Signal Added)

- 9 (a minor 3rd to a Major 3rd)
- 10 (a 2nd above to a Major 3rd above)
- 11 (a 3rd above to a 4th above)
- 12 (a 4th above to a 5th above)
- 13 (a 5th above to 1 octave above)
- 14 (1 octave above)
- 15 (1 octave down)

Level - The **Parameter 2** knob adjusts the volume of the Whammy™. Ranges from 0 to 99.

Delay

Delay is an effect that will record a portion of the incoming signal, and then play it back a short time later. The recording can repeat just once or several times.

Type/Level - The **Parameter 1** knob selects one of the 3 different types of Delay, as well as the volume level of the Delay.

0F - Turns the Delay Effect off.

1d through *9d* - These are Digital Delays with Level control.

1A through *9A* - These are Analog Delays with Level control.

1P through *9P* - These are Ping Pong Delays with Level control.

Delay Time - The **Parameter 2** knob adjusts the amount of Delay time. Ranges from *1* through *99* (10 through 990 ms), and *1* and *2* (1 and 2 seconds).

Delay Feedback - The **Parameter 3** knob adjusts the number of repeats. Ranges from *0* to *99*.

Reverb

Using reverb in recorded program material gives the listener a sense that the material is being performed in an actual room or hall. It is this similarity to actual acoustic spaces that makes reverberation a useful tool in recorded music.

Reverb Type - The **Parameter 1** knob selects the Type of Reverb or acoustic space.

Decay - The **Parameter 2** knob adjusts the length of the Reverb. Ranges from *1* to *99*.

<i>St</i> = Studio	<i>Pl</i> = Plate	<i>Ch</i> = Church	<i>Sp</i> = Spring
<i>Wo</i> = Wood Room	<i>Ha</i> = Hall	<i>GR</i> = Parking Garage	
<i>Cl</i> = Club	<i>AP</i> = Amplitheater	<i>Ar</i> = Arena	

Reverb Level - The **Parameter 3** knob adjusts the volume of the Reverb. Ranges from *0* to *99*.

Section Four - Other Functions

Expression Pedal

The rear panel of the RP100 includes an input for an expression pedal. Any passive volume pedal will operate as an expression pedal with the RP100. Connect from the output of a passive volume pedal to the **Expression Pedal Input** on the RP100. The expression pedal will control the RP100's Volume, Wah, or Whammy™ parameters. If Wah and Whammy are disabled, the expression pedal will function as a volume pedal. If the Wah or Whammy™ effects are enabled, the expression pedal will control these effects.

Rhythm Trainer

The RP100 includes several sampled drum patterns which are useful for developing a good sense of timing. Pressing the **Rhythm** button will enable Rhythm mode and start playback of the drum loop (except when in Store or Bypass mode). In Rhythm mode, the **Parameter 1** knob selects the drum Pattern, the **Parameter 2** knob adjusts the drum Tempo, and the **Parameter 3** knob adjusts the Level of the drum loop. Press the **Rhythm** button again to stop playback of the drum loop.

Factory Reset

This function resets the RP100 to its original factory settings. This procedure will erase all custom user Presets, and recalibrate the Expression Pedal.

ATTENTION: Performing this function will erase all user-programmed data. All such data will be lost forever! Be sure you want to erase the memory and start fresh before continuing with this procedure.

The procedure for performing a Factory Reset is as follows:

1. Disconnect the power supply from the RP100 (AC Power) or unplug the guitar from the input jack (battery power).
2. Press and hold the **Select** button while re-connecting the power or plugging your guitar into the RP100's input.
3. When the display shows --, release the button and press then press the **Store** button. The display will then read rE and the RP100 will reset to the original factory settings.

Section Five - Appendix

Specifications

Input: 1/4"

Output: 1 - 1/4" Stereo TRS

Headphone: 1/8" Stereo TRS

A/D/A: 24 bit Delta Sigma

Power Supply: 6 AA Batteries or 9 VAC, 1.3A (PS0913B)

Power Consumption: 1.3A

Memory: 40 User/40 Factory

Effects: Pickup Simulator, Wah, Compressor, 12 Amp/Guitar Models, 3 band EQ, Noise Gate, Cabinet Modeling, Mic Placement, Chorus, Flange, Phaser, Tremolo, Panner, Vibrato, Rotary Speaker, Auto Yah™, Enveloped Filter, Pitch Shift, Detune, Whammy™, Delay, and Reverb.

Rhythm Trainer: 30 Patterns

Simultaneous Effects: up to 12

Dimensions: 8.25" L x 6.25" W x 2.25" H

Weight: 2.25 lbs. w/optional power supply

Preset List (User/Factory)

1/41	Big Solo	21/61	Tweedy
2/42	Classic Clean	22/62	Match This!
3/43	Chunk Rhythm	23/63	Voxy Vibe
4/44	Auto Ya	24/64	Stacked
5/45	Scoop	25/65	Jazzy Clean
6/46	Octa Sub	26/66	Fusion
7/47	High Gain Lad	27/67	Rotary Club
8/48	Limpy	28/68	Clean 5ths
9/49	Cowpie	29/69	Tweed Blues
10/50	Vibro Thang	30/70	Muddy Acoustic
11/51	3rds Crunch	31/71	Slider
12/52	Triplets	32/72	Texas Blues
13/53	Boogie Dirt	33/73	Clean Funk
14/54	Rectofy	34/74	Wahs Up
15/55	Clean Tube	35/75	Be Bad
16/56	Gainster	36/76	Auto Wah
17/57	Crunch	37/77	Surfin
18/58	Auto Swell	38/78	Foxy Mama
19/59	Wailin'	39/79	Angus
20/60	Studio Clean	40/80	Whamm Bamm

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